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LEADING ARTICLES

GENERAL OBSERVATIONS ON ACUTE AND CHRONIC RHEUMATISM.

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CHICAGO.

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I wish to express to the Will County Medical Society my full appreciation of the honor conferred in asking me to appear before it for a second time. When your secretary asked me to discuss any phases of rheumatism, which I might care to take up, I could not resist the temptation of presuming upon my previous welcome from you. The field is so extensive that I must necessarily limit myself and, therefore, I select some general considerations on the etiology, pathology and symptomatology of the acute form, while confining myself to some general aspects of the chronic type.

ETIOLOGY.

It seems to be a generally accepted dictum, at present, that acute articular rheumatism is an infectious disease, whose causative factor is still a relativly uncertain one. The view of Singer, that acute rheumatism is not a distinct clinical entity, but a modified pyemia due to the action of the streptococcus pyogenes, which has become attenuated in its passage through the adenoid tissues of the throat, has a certain element in its favor, namely, that the atrium of infection in the acute form is frequently through the tonsillar structures, although the condition is in no sense a pyemia. The work of Achalme, who attributes the rheumatic state to a specific infection with an anerobic bacillus has, in more recent times, given way to the views of Poynton and Paine, that acute articular rheumatism is an infectious disease, due to an invasion by the diplococcus rheumaticus, a strepto-diplococcus. While this latter organism has been isolated by these workers in many cases of acute rheumatism, other workers have not been so successful and have been lead to doubt the work of Poynton and Paine, especially as regards specificity, from the negative results of their own work. Whether this organism will stand the test of time as the causative factor of rheumatism, remains to be decided but it seems to be the most probable one. Cole's observations on this subject are very much to the point. He says, "I greatly fear that we are not yet in a position to make any positive statements as to the etiology of this disease. It seems to me that there are three possibilities: first, that acute articular rheumatism is a definite infectious disease, the cause of which we do not know, and that the cocci which have been isolated were secondary invaders. Second, that there is no such specific disease as articular rheumatism, but that the cases grouped under this term are those of mild or moderately severe cases of general streptococcus infection, in which the joint and heart are generally involved. Third, that acute articular rheumatism is due to a special form of streptococcus, which at present we have no accurate methods of distinguishing from the streptococcus pyogenes, but which, owing to the specific character of the lesions induced in man, must possess special characteristics."

While the direct etiologic factor in this disease is not firmly established, we are all well aware of the fact that certain predisposing factors exist, such as hereditary or constitutional peculiarities, which make infections in general very easy, and may tend to the easy conquest of the system by the rheumatic agent. Moreover, exhaustion, exposure to cold and dampness, depression of general and of special body functions, play a large role in making the system susceptible to inroads by infection of any character. It is a

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well known fact that digestive disorders may bring on a congested condition of the buccal structures, and in doing so may render the tonsillar structures more susceptible to such rheumatic infections. Of course, susceptibility to rheumatic infection varies in different persons, just as it does for other diseases of an infectious nature, but the factors which determine this susceptibility are still little understood. The work on the antibactericidal power of the blood, as shown by the opsonic index, and that on the varying degrees of alkaline reactivity of the blood may, some day, open up this obscure field and teach us the factors which may enable us to strengthen a disordered system for its fight against invasion by infectious organisms.

PATHOLOGY.

The diplococcus rheumaticus, like the streptococcus pyogenes and other infectious organisms, seems to be capable of producing widespread inflammatory processes, while the joint involvements are, in the beginning more prominent. Just what determines this early localization in the joints is a hard question to settle. We must recall, in this connection, that other organisms, which are specific in the causation of certain diseases, such as pneumonia and typhoid, frequently give rise to involvement of other organs, without showing the characteristic changes of the disease itself; so we often observe in rheumatic infections that a tonsillitis or, even, an endocarditis, may be the only factors which may lead us to assume a previous rheumatic infection, especially in children.

The degree of joint involvement varies widely in the different cases, from that of a single one to that of an extensive articular affection, the latter being observed as the disease progresses. These processes are, usually, non-suppurative, and, when complicated by pus-formation, must be assumed to be of mixed infection. If the streptococcus pyogenes be really the cause of the rheumatic process, it is hard to understand why the joint affections are usually non-suppurative. The synovial membranes are thickened by the inflammatory edema and the peri-articular structures are the seat of more or less extensive inflammation. The invasion of these tissues by leucocytes and, later, by fibroblasts, leads to the formation of much fibrous tissue, which may be so extensive, in cases resolution does not take place, that stiffness and even ankylosis may supervene, thus passing into the sub-acute or chronic type of this disease. Occasionally such changes do not occur at all and the joint shows little change after the inflammation has subsided. The material drawn from the joints is usually small in amount and is, ordinarily, sterile. This sterility may be due to the excessive phagoctyosis which occurs, or to our faulty cultural methods. This later point may explain the reason why various workers have failed to discover Poynton and Paine's micrococcus.

The pathologic changes in the heart occur in the majority of cases and may be more or less extensive. Fatty degeneration, parenchymatous myocarditis, and endocarditis, involving more frequently the mitral and aortic valves, are the more usual cardiac lesions, while pericarditis may occur. It is to be emphasized that endocarditis in children may be the only evidence of a rheumatism, which may be subsiding or latent. Babcock thinks this such an important point that he advises every family physician, who has the care of children, to pay particular attention to the heart in any case in which the child is not well, even if no evidences point to this organ, as by such repeated examinations one will frequently stumble upon evidences of inflammatory action.

The frequent involvement of the tonsils and peri-tonsillar structures in the early stages of rheumatism should put us on our guard as to the cause of any case of tonsillitis. Many cases of rheumatism show recurring involvement of these structures as the only evidence of the "rheumatic diathesis."

This gland is the most frequent source of infection in rheumatic cases and should be frequently examined in suspected cases. Whether the removal of the tonsil has lessened the rheumatic infections in childhood, is a question that statistics have left unsettled. It is a valuable point in prophylaxis to pay considerable attention to the throat and to the frequent use of gargles and mouth sprays, especially in delicate children. The serous surfaces, such as the pericardium, pleura, and peritoneum, may be involved in this process or there may be a poly-serositis. This is characterized by a plastic fibrinous or sero-fibrinous inflammation. If the effusion, which is usually small, becomes very extensive, the change is due to transudation as the result of cardiac or renal involvement. This may lead to thickening of the membranes or to adhesions between adjacent structures. Fibrous nodules may appear in the tendons, tendon-sheaths, skin, and muscles as the result of a round-cell infiltration (inflammation) of this structures. These foci may become converted by fibro-plastic change into permanent deformities, which may resemble certain subacute and chronic types of this disease.

Vincent has pointed out the frequency with which the thyroid gland becomes acute-

ly swollen in this disease. The swelling and tenderness seem to be absent in the benign forms and in the chronic types, while in the severe acute types the changes in the thyroid usually run a course parallel to those in the joints. His deduction from these facts is that an insufficiency of the thryoid excretion has something to do with the progression of this disease. What the influences of the thyroid upon the rheumatic processes are must be left at present to the realm of hypothesis. The morphological changes in the blood are not of diagnostic value. We find a more or less extensive anemia of the secondary type characterized by a diminution in the amount of hemoglobin and by a reduction in the number of reds, this latter oligocythemia occurring to the extent of one to two million cells, while an apparent normality may obtain if the blood be examined during the period of marked sweating, owing to the concentration of the plasma. Osler has said that the blood is the best index of the severity of this disease, but this can be true only as regards the destruction of the red cells. The fibrin net-work is extremely dense in the blood drawn from rheumatic cases and may have some diagnostic importance. The leucocytes are increased in proportion to the severity and acuteness of the disease, this lecuocytosis being usually moderate and of the polymorphonuclear type. The reactivity of the blood seems to be slightly changed owing to the formation of formic and lactic acids, which have been reported in some cases. As we know little about the changes in the fluid portions of the blood in any of the infectious processes, it seems useless to speculate upon the possibility of variation in this disease. The nutrition of the system is markedly reduced, but whether this is due to abnormalities in the plasma as the result of a toxemia, or to other causes must be left undecided.

The urinary findings have shown nothing characteristic in this disease beyond the possible increase in the formic acid excretion, as reported by Walker. At the height of the disease the ordinary febrile characteristics will obtain. It is probable that the metabolic disturbances, which surely occur in this as in other infectious processes, are merely the result of a local and, later general, action of the invading organism, but nothing specific has been found in the urinary output.

SYMPTOMATOLOGY.

The symptoms of this disease are protean in character. They are such as might naturally follow any acute infection, especially in the onset and are localized somewhat later. As this disease is not essentially a local one, but a general infection whose more common seat of intense involvement is the joints, we may find the most variable symptomatology. The onset may be slow preceded by a feeling of malaise, vague pains in the muscles and joints, a general sense of discomfort, slight rise in temperature, epistaxis, headache and sore throat. It is, however, more frequently sudden in onset with chill, fever which may soon reach a fairly high degree, severe pains in the joints, and extreme prostration with a rather high-grade anemia. The pain is usually extreme and the fever racked patient is unable to find any position in which he may lie that will not be uncomfortable. The joints are, not usually, involved all at once but in turn, the knee joint being more often the point of first attack. The characteristic shifting of the pain from one to another joint is well known to all of us. The joints are red, swollen, very painful, and tender.

Marked sweating is usual and the perspiration has a peculiar sour odor. The appetite is poor, the bowels are constipated, the tongue is furred, and the breath is foul. The thirst may be intense as is usual with infectious processes accompanied by marked pyrexia. Mental symptoms are not uncommon and may assume various forms from simple insomnia to marked delirium. Chorea is a frequent sequela of this disease, while meningitis is relatively uncommon.

Sooner or later signs of involvement of the heart appear. Almost any variety of cardiac affection may be observed but more commonly and endocarditis or a pericariditis, more rarely a myocarditis, may obtain. Great care should be taken to watch the heart in any case of rheumatism and to take measures for resting this organ as soon as signs of involvement appear. Whether cardiac sedatives are desirable in such cases must be left to the experience of the practitioner, but it would seem advisable to restrict drugs as much as possible and resort to other measures to quiet the heart. The time will come soon enough when the heart must be stimualted to overcome the effects of a valvulitis. Rest in bed, after the acute symptoms have abated, is always advisable in cases in which the heart has shown any signs of involvement. The period of rest will depend on circumstances and no absolute time can be stated. It is better to keep the patient in bed with the cardiac treatment well-instituted than to allow him up too soon. In this way we may save the patient much later trouble.

I cannot take the time to discuss the symptoms, seriatim, but wish merely to mention that all of the various signs must be watched

with care, as this is not a disease limited to the articular structures, but involves so many other tissues that the joint affection may be considered, to some extent secondary from a therapeutic standpoint. Do not think the danger is gone when the pains have subsided or are well-controlled by the salicylates. It may be necessary to keep a patient in bed for weeks, or even months to be sure that the hear is working properly.

The acute muscular rheumatism has much in common with the articular form, but its etiology and pathology are somewhat different. It is not generally supposed to be of an infectious nature, but is due rather to a direct myositis as the result of exposure to cold or dampness, to general exhausting conditions, or even to muscular injuries. It usually subsides without much treatment beyond that of rest and, of local applications. The salicylates seem to have little influence in a large number of these cases of muscular rheumatism, but occasionally one is found which reacts promptly to such medication.

CHRONIC RHEUMATISM.

Chronic rheumatism has been so much written about that one hesitates to attempt anything further. However a few observations may be pertinent. Naturally we must, at the outset, have clearly in mind just what is meant by chronic rheumatism. We find that the various classifications of the chronic types of muscular and of joint disease have resulted in more or less confusion owing to the mixing of clinical entities with similar pathological findings. Thus we recall the fact that chronic rheumatism and arthritis deformans are by many used as synonymous terms, while by not a few clinicians they are distinguished. Without going into this differentiation, for there is little doubt in the writer's mind that they are distinct conditions, permit me to say that the etiology of these conditions when definitely established will probably show differences in each class, but causing a somewhat similar symptomatology, the disorders of metabolism in each class being different. It is not a mere coincidence that the large joints are usually affected and are relatively movable with a peculiar grating sound in arthritis deformans, while in chronic rheumatism the smaller joints are usually first attacked and later become fixed. It is not strictly scientific to call two diseases identical if their pathogenesis is different. and if different factors are causing the localization and the extension of the process in the two conditions. It is true that there are many points advanced which seem to indicate the unanimity of some of these chronic troubles, but I do not feel that we should accept them until the pathology is cleared up.

We all know that chronic rheumatism may occasionally follow the acute disease or may, by an insidious onset, manifest itself as a fully developed chronic condition. The causation of this chronic condition may be the previous infection which has become latent, may be of nervous origin, may be of an infectious type different from that of the acute form, or may be of purely metabolic origin. I shall not attempt to go into the arguments pro and con for the differentiation of the various types, but will rather attempt to discuss a form of chronic rheumatoid trouble which seems to be purely metabolic in origin or, at, least, may be fairly well explained on that basis. In this form the general muscular system is more prone to be involved than are the articular structures and the course is rarely progressively toward deformity as in the more usual types of chronic rheumatism or of arthritis deformans.

We must admit, I believe, that a certain relationship exists between gouty states and certain types of chronic articular and muscular conditions of the rheumatoid variety;. While we have not been able to get at the bottom of the pathogenesis of gout any more than we have of that of chronic rheumatism, there seems to be a similarity in the two conditions which is perhaps a little closer than that between other forms of these chronic types. It is true that we cannot put our finger on the casual factor in progressive chronic rheumatism, but must content ourselves with the possibility of its being a disease of the central nervous system of the tropho-neurotic type, with a second assumption that it is a sequela of the acute form, or with a third hypothesis that it is a chronic infection different from that of the acute form While we know that our former ideas of the causal relationship between uric acid formation and excretion on the one hand and gout on the other must be radically changed in view of recent investigations, yet we do find certain forms of chronic rheumatoid arthritis and myositis as the direct result of perverted metabolism especially of the protein bodies. This form rarely manifests acute symptoms, but rather shows the typical long-continued course of a chronic state. We all know that a deranged metabolism which affects the functions of various organs of the body may exist for years without manifesting any marked disturbance of the health, yet the long-continued application of the cause will in time bring about its result. It is just here that we find, in a certain group of cases, such conditions. Pa-

tients will come to you with a history of gastro-intestinal disturbance, of malaise, and of muscular tremors and prickling sensations lasting over many years. These premonitory symptoms are often seen in the ordinary type of progressive, chronic rheumatism. Your examination of the patient as he presents himself reveals an extensive muscular tenderness and swelling, a certain stiffness in the joints, a slight temperature, considerable anemia, more or less constipation, perverted appetite, pulse a little rapid, but full and strong, respiration normal, blood and urinary findings, negative, with the exception that the urine may show enormous amounts of uric acid and of calcium oxalate. Heart involvements are rare in this type as they are in the other forms of chronic rheumatism unless this latter type of the disease has been an extension of the acute form.

A very common cause of the conditions outlined above is the use and abuse of an excessive diet, especially of the protein elements. I do not mean in this connection that protein in itself is a precursor of what we know to be often associated with these symptoms, namely, uric acid, but rather that excessive protein ultimately brings on a chain of symptoms, which is manifested by a breaking down of the nuclein-containing substances of the tissues and by the later elaboration of these products into uric acid and other purin bodies instead of into urea and CO_2. This is partially due to the diminished oxidative powers which the system has in these conidtions. This is not the time or place to bring out the distinction between ordinary protein and the true precursors of uric acid, that is the nucleins, suffice it to say, that a marked chemical distinction does exist, and to this fact we owe our present ideas regarding the source of the endogenous and exogenous purin formation. While it is still a debatable question whether uric acid or its associated purin compounds are directly responsible for the gouty condition; it cannot be doubted that, in practically all cases of gout and of the type of chronic rheumatoid affection, which I have in mind, uric acid or is salts are deposited in the joints and muscles. What determines this deposition in the joints in the case of gout and in the muscular tissues in this type of chronic rheumatoid trouble is debatable, but the deposits are there. The time has gone by, it seems to me, when we should discuss uric acid and the uric acid diathesis in the same old way. There is little doubt that some disorder, whether metabolic or inflammatory, is at the bottom of the symptomatology, but what it is we do not know. It is possible that further study of special ferment action will clear up this field to some extent, and may account for the initial joint necrosis which Ebstein assumes to be present before the uratic deposit occurs in the joints of the gouty.

The point to be remembered is that uric acid in its decomposition and excretion is independent of the general nitrogenous metabolism. It can arise only from the nucleins of the food and tissues and has, therefore, nothing to do with the extra-nuclein decomposition. It is a matter of every-day observation that administration of a nuclein-free diet, although the protein intake may be enormous will in no wise alter the ordinary exogenous purin metabolism, although the endogenous metabolism may be slightly increased owing to the marked leucocytosis which occurs after heavy protein intakes.

While uric acid has been held accountable for many things, especially by Haig, it cannot be found guilty except as a contributory factor, in the causation of this group of chronic non-gouty, metabolic, musculo-articular troubles.

The constant overloading of the system with protein material taxes the digestive system in its efforts to properly disintegrate them and prepare them for future elaboration elsewhere. These digestion products, excessive in amount or in kind, are carried to the liver by the portal ven and force this organ to exert itself to such an extent that we may have an insufficiency of this organ as regards its function of converting these splitting products into urea. Should the food material contain a large amount of nuclein substances, uric acid and its associated purin compounds will reach the liver and, owing to its insufficiency will pass the hepatic filter, under these conditions, and will exert their influences upon the general system. A type of toxemia is well-known to follow such conditions of hepatic insufficiency, the symptoms of which are related to the muscular or articular structures only when the nuclein decomposition products are excessive in amount. We may thus have two distinct conditions, the one causing the usual train of symptoms known as acidosis, and the other the symptom complex which I have in mind as a form of musculo-articular troubles of a chronic type. The oxidative processes of the system are reduced, intermediary metabolic products are formed, and the patient slowly but surely becomes a victim of the toxemia which results in a deposition of urates and of associated bodies in the muscular tissues. Here again we are confronted with the question, why do these deposits occur in the muscles? I shall not attempt to answer this question, as anything

I might say would be merely hypothesis. However, such a condition does exist and disappears under the institution of treatment to increase elimination and the oxidative powers of the system.

Whether this type may be regarded as the result of a latent infection the writer is unable to state, but it seems more plausible to assume a direct perversion of general and special metabolism. Medication has little influence over this condition beyond symptomatic control, and should not be relied upon as much as hygienic and dietary measures. Deformities rarely occur in this type, but if the deposits spread to the joints a subacute inflammation may result in the thickening of the articular structures and in the permanent fixing of the joints.

It is a well-known fact that the other forms of so-called chronic rheumatism are difficultly amenable to medical control, and it may be possible that future studies of metabolic relations in these diseases may clear up certain points which are at present absolutely obscure. Be that as it may the chronic types of rheumatism are not of favorable prognosis as they progress, often in spite of our best efforts, to permanent deforming conditions which place them in the category of incurable states. Surely no class of diseases with which we meet is more deserving of our careful attention than are the cases of acute and chronic rheumatism. While the acute forms are usually amenable to treatment as far as the primary joint and muscular affection is concerned, yet their effects upon the heart are so great as to spur us to our best efforts Therapy has been shown to have little control over the development of the cardiac involvement, yet proper attention to every detail of the case will lessen the danger We all know the valuable results of salicylic medication, yet we are quite as alive to its inertness in preventing cardiac trouble.

In this paper I have tried merely to express the general view of the acute condition and have left untouched the subject of treatment in detail as this would alone consume my time. In the discussion of the chronic types I have limited myself to a few remarks upon the apparent metabolic type as so little is known about the other forms of the chronic cnodition that discussion is unnecessary. If I have presented any facts regarding our old bug-bear, uric acid, in such a way that its influence may be better understood I shall have been well repaid for my efforts.

100 State street.

GLIMPSES OF EARLY ST. LOUIS MEDICAL HISTORY.*

CHAPTER V.

W. B. OUTTEN, M. D.

ST. LOUIS.

Dr. John J. McDowell.

Dr. John J. McDowell was born in Kentucky, February 6, 1833. He came to St. Louis when a babe in arms, with his father, Dr. Joseph Nash McDowell. At four years of age he had a stroke of paralysis and the only seemingly after-effect was a sligh t ptosis of his right eye. He practiced medicine in St. Louis for nearly twenty-six years. He was Demonstrator of Anatomy in St. Louis Medical College, and afterward became professor of General and Descriptive Anatomy, and retained this position up to the time of his death, in 1880. Dr. McDowell had been taught anatomy by his father at a very early age. He was a frequenter of the dissecting-room and a dissector of the cadaver when a candle box was necessary in order that he might be brought upon a sufficient level with his subject when dissecting. The dissecting-room was with him as much an abiding place as the play ground.

At the time the writer attended lectures in St. Louis Medical College Dr. McDowell was demonstrator and of all the men the writer has ever seen occupying this position Dr. McDowell was certainly and peculiarly the most efficient demonstrator he ever met. He was an admirable, capable and successful teacher. He seemed more competent to get nearer and to get more out of the ordinary student than any teacher at that time in the City of St. Louis, if not in the West. Of all the truly democratic, free and easy places in a medical college, none could equal the dissecting -room, for if dignity dared to show her head it was assailed with words and actions definite and determined. Indeed the demonstrator had to be a Democrat in the best sense of the word, ever earnestly striving to elevate the student to a higher knowledge of anatomy. Pure democracy, and pure democracy alone, had to satisfy both teacher and pupil. There was one constantly and determinedly maintained mandate, and that was that each and every student must use the dead body with extreme utility and care, never pass over a single thing, without knowledge of what it was. He must always call the demonstrator before it could be des-

NOTE.—Chapter I of this series, dealing with the life of Drs. Joseph Nash McDowell and M. A. Pallen appeared in the Medical Fortnightly, March 25, 1908; Drs. Adam Hammer and M. L. Linton, April 10th; John T. Hodgen, April 25th; Charles Alexander Pope, May 25th; Chas. W. Stevens, June 25th.

troyed. Again, under no circumstance would a student be permitted to dissect his cadaver beyond the region assigned by the demonstrator, and he must always call him to have new parts assigned for dissection. The dissection must always be done according to rule, that is "secundum artem," no part of the body must be wasted, unless the warm weather had so decomposed the parts as to debar the possibility of dissection. "Say, you fellows, what in the devil are you doing?" remarked our free and easy demonstrator. "This isn't a butcher shop, you ain't cutting an ox or a jackass. Why don't you know this is a d—n good subject? Yes, an awful good body, and it's made for dissection so you can learn and you fellows shan't cut it up like a piece of wood. Now, don't let me see you doing this again. You always call me when you want to know something and you bet I 'll come, that's why I am here."

"Say, Jeems," said our free and easy demonstrator, "you're a mighty poor dissector, and a d—m poor scholar, what muscle did you say this was?" Here Jeems read out of his anatomy, "the external peter-ygoid is a short thick muscle somewhat conical in form which extends almost horizontally between the psygomertic fossa and condyle of the jaw." "Well, I be darned if you don't make me sick. There is no such word as peterygoid it is pterygoid, pronounced 'terrygoid.' Say, how on earth can you make zygomatic to be 'psygomertic?' Say, you had better go home and spread manure and let medicine alone." So our demonstrator would go, commending this one, chiding and abusing another, and if the behavior of the student was too rank he would be cussed good and plenty according to students' vernacular. No matter what he said, no one took offense for it was John McDowell, and that ended it.

Example may be more efficacious than precept, but it is true beyond real doubt and cavil, that young men take a greater pleasure in learning from it than they do the most perfect precept. While the dissecting-room was run on free and easy lines the bodies were dissected with every real and honest purpose to obtain all possible information; every organ was demonstrated with great thoroughness. Praise and commendation upon the part of the demonstrator made each and every student strive to make the best and most perfect dissected area. When an area was completed the muscles were smeared over with blood to make them look fresh and prominent. The arteries were more or less filled and distended with plaster paris to make them stand out, the veins carefully preserved, the nerves kept, when possible, in position, and the relation of all parts preserved. When any especially good work was done by any student the demonstrator would call the rest of the students to note the beauty of the work. The brain was always considered as the organ of organs to be demonstrated. It was never at any time made a trivial matter; it was always an important event. The demonstration generally started with the muscles of the head, the scalp, its blood and nerve supply, and after the calvarium was removed the course of the sutures shown, the presence of the Wormian bones, then the outer and inner table of the skull, along with its spongy structure was indicated. The dura mater was then carefully demonstrated showing its attachments at the base of the skull, the basic sutures indicated and then where the dura mater by its attachment to the ridges of the fossa making sinuses, then the cella-turcica and other important parts; then the blood vessels and nerves supplying the dura, then the character of its processes and the position they occupied, such as the falx cerebri tentorium cerebelli, then the dura was shown to be a fibro-serous membrane and that there were only three fibro-serous membranes in the body, namely, the dura, pericardium and the tunica vaginalis estis. As the brain was raised up from its bed the cranial nerves in order named, showing their superficial or apparent origin, and their deep or real origin, then a desertation upon their functions and distribution and peculiarities. There was not a point in the entire demonstration of the brain that was gone over loosely. It frequently took several nights to complete it, and in those days, forty years ago, it was not an infrequent thing to have students remain in the dissecting-room as late as 2 or 3 o'clock in the morning. It can be said with truth, that the deepest interest and infatuation was inculcated by the demonstrator and maintained by the students. Let the ganglion of Ribes, the circle of Willis, the pineal gland, the lyra, the iter-e-tertio ad quartum ventriculum, and other important points brought plainly in sight, then each and every student had to closely inspect and exactly know where and what it was.

Perhaps it may not be uninteresting to those who only know the modern dissecting room to have pictured to them a dissecting-room forty years ago. There were two dissecting rooms in this college. Conceive, then, if you will, large room, say 60 x120 feet, whose walls might have once been whitewashed, but now a green black, hoary and dusty by use, time and neglect.

The windows of this room had ceased to be transparent, between dirt, the play of coal dust and moisture, their opaqueness was definite, pronounced and disgusting. Grouped around this large room were long four-legged tables nearly seven foot long and about four feet tall, with legs at the head of the table some three or four inches longer than those at the foot so as to make an incline. Around the outer edge of the surface of the table was cut a groove, and at the lower end an augur hole served to let the fluids trickle through, not in buckets or other receptacles, but upon the dirt and sawdust begrimed floor. The floor scantily covered with sawdust, hoary with filth, while the ceiling above was unplastered and blackened rafters came plain to view. Like Disraeli, the writer is compelled to confess that his experiences forces him to believe that cleanliness and order are not matters of instinct, but plain matters of education, for true indeed education was broad hygiene scant. Here upon the walls some student had hung upon a nail a dissected upper extremity, bereft of all else but fibrous tissue, cartilage and bone, and its reeking fluid had streaked the walls in fantastic shape. Here hung a leg and there a hip adorned the wall; here stretched out in loops on nails hung the intestines of man curved in semi-circles in order to show the wondrous length of these in this peculiar case. Here was upon the wall a large and smeary stain, showing where some student had thrown some softened organ against the wall, and here traced in bloody gore was a ruddy face made gory and gruesome, though depicted in attempted fun. Here on the northern wall was an iron door, its sill besmirched around with blood and reeking filth showing an entrance into a chute which was for the purpose of carrying dissected remnants to the sewer beneath. Now and then a spadeful of quick lime would be thrown down for the purpose of combating the smells contained therein. 'Twas a parody of well intended weakness against a most monstrous thing. Let the weather become cold and zero affected, then these bodies froze, froze just as they were left. Here, perchance, was one with both arms extended above, this grinning skull made gruesome effect; here another subject with legs wide spread stood a rigid thing, gaping into nonentity. A large old cannon coal stove was filled to the very brim with coal and set a fire, and as its sides became red-hot and the light above shed a glamor, it was indeed a gruesome sight to go into this room at night, yes, into this dimly lit room to see these bodies standing upright besides these tables in the process of thawing out. When the warm weather made these dissected corpses soft, then perchance some student might open a window or two, but such petty things as sanitation and hygiene had no place here. For amidst all of the supposed intelligence existing in the faculty of this institutions the condition of the dissecting-room in the very nature of itself had to be a filthy and dirty thing. Cleanliness here was indeed unknown, and in this clime real warm weather very often comes in December and January, and looking at these decomposed bodies, Shakespeare's lines appeared very appropriate, when he says:

> 'Tis but an hour ago since it was nine
> After one hour more 'twill be eleven;
> And so from hour to hour we ripe and ripe,
> And then from hour to hour we rot and rot.
> And thereby hangs a tale.

It is an established fact, at least during the time the writer attended lectures, from three to five students died annually of some low form of fever which was attributed often to too close an attendance upon the dissecting-room. Indeed the writer has heard it related often and often again, as though it were a perfectly natural thing, that many of the students of this college carried around with them cadaveric odors. To the writer's knowledge, one of those divine and dainty misses whom students hold in awesome and thrilling admiration said in a most careless way, "I really like Mr. P. M., he is awful nice, but don't you know sometimes he smells horrid." "Yes," said another somewhat knowing miss, but for heaven's sake don't tell, Dr. P. told me that that odor was the odor of dead bodies, a horrible dissecting-room smell." Indeed this was the case, for so deeply would a student become impregnated with these dissecting-room odors that it took more than baths to eliminate them. This the writer can aver, even in his own case. It may not be out of place to tell a few stories of student happenings about these very rooms. Here was on J. K., a student, eager, devout and retiring, but withal a timid and suspecting individual. He went into the dissecting-room one night and thoughtlessly locked the door. He lit a match, expecting to light the gas and study until the demonstrator and the rest of the students came, but his match flickered out. 'Twas his only one. He became demoralized. Another student coming to the dissecting-room tried to open the door, but could not, but he heard a voice say, frightened, small and weak: "keep knocking, keep knocking." Now, the student on the outside of the door, began to have stiffened hair and fright beseiged him too, but the still small voice kept repeating, "keep knocking," and held

the outside student almost spell-bound, but he finally fixed himself so that he might have free and uninterrupted flight down the crooked stairs, so he kept knocking until J. K. fumbled at the door and came out, pale and confoundedly confused, he heaved a sigh and then told how he had lost himself in that room and by saying, "keep knocking" he was able to locate the door.

'Twas a frequent thing in those days for some mischievous students to open wide the dissecting-room doors, turn out the light, then hide themselves in the dark, and arming themselves with soft livers, spleens, muscles and other things, and when the student arrived at the door let fly these soggy articles when they would delightedly rush to the door to see how fast this assailed student would get downstairs. It will hardly pay to go over any more of these stories of student days, but if ever there was a place on earth which could and would make an emotional man moralize that place was a dissecting-room forty years ago. The lines here following simply indicate their influence upon the writer:

Great Caesar. what a delicious place to ravage a man's asthetic dainty taste,
No ancient catacomb or tomb can transcend in sombre scenes this dismal odorous place;
Behold on rough ugly tables hereabouts, lie dissected bodies havocked by saw and scalpel,
Fetid reality here reigns, grim and rank, full of horrid sights and corpses smell;
Yea, thou mutilated and shredded mortal, perhaps 'twas you who the strangest of strange stories purled,
Perchance 'twas drink, or kindred curse which hid your talents from this blind old world.
Well, thou disemboweled and organ-bereft man, indeed they built you upon Samsonian plan,
Your huge chest, big muscled ponderous limbs must have made you a terror to weakly man,
True had Nature blest you with brain and intellect big, you would not now bide in this unkempt room,
For your wisdom's power and intellect's force, would have made the living bury you in marble tomb;
So, thou legless, armless corpse, from whence art thou? what on earth brought you here?
Surely thy big head, thy body gaunt and strong, bespeaks power, then what blighted your career?
Fate compels these hacking learning medics to sever thy arms and legs, and make thee a suggestive wight,
Bah, but can it be that once you were a darling precious thing in some loving woman's sight?
Really, thou brain-emptied corpse, how firm of jaw, indeed your face wears real purposed power.
True, 'twas a little place, no bigger than a dime diseased your brain. this thy sad inherited dower;
For thee, time test and opportunity were naught, while dire hallucination sped thy soul on and on in frenzy's whirl,
Thy will became a palsied thing to make thee emotion's fool, to live soul wrecked in this sordid world.
Heaven's here indeed is a grinning mess, yes, true 'twas once women comely and divine, lost in sin,
Oh, thou poor, petty, pitiful thing, great heaven's how this big world did berate you now dear God's charity begins,
Oh, pitiful the fool who thinks that any mortal ever on earth could have such charity and love as God,
Yet still more pitiful the fool who thinks that our dear God made this woman only for eternity's torturing rod.
Pshaw, let the world contend for eternal punishment, but we know that man acts as God decrees,
Then let death come, for we believe that a glorious heaven awaits each and every one, to glory in divine eternal ease,
Oh, marvel, at any time in all the world, has there ever been mortal competent to fathom mind, what then is mind?
In all time, in the history of all men, was there ever man who solved faith or knew its wonders sublime?
In all life ever on our sphere, was there ever a soul who knew the depth and power of charity divine?
For in all worth which life ever held what's competent to make man God-like and divine? only faith, love and charity can, divinty's all.
There is no eternal punishment, let pedants prate about hell and damnation, for man's man and God's man above all.
Then when man is blest with perfect mind, faith, charity and love, he will ever bide in ineffable bliss on earth as well as in heaven above.

Dr. John J. McDowell was a small, slim man, with a graceful rounded forehead and a well-shaped head withal, of the pure Byronic stamp. His face was lean, a well-kept moustache adorned not an over firm mouth.

He did not have the face of strength and purpose, but the face of a dreamer. His voice was chatty and agreeable and he possessed a singular magnetism, and owing to a strange lack of dignity a hale-fellow-well-met air made him become to all who met him, an unusually interesting character. He was somewhat bow-legged and as he facetiously explained, that he was like all real Kentuckians, he had been made to straddle a whiskey barrel too much, and at too early an age, to give him graceful limbs. While Dr. McDowell enjoyed a large practice, mainly among the younger set, yet he never accumulated money, and those who knew him say that the immense amount of charity which he gave in his practice would be hard to compute. His first office was on Third and Market streets, which was surrounded on all sides by the poor and needy, the levee rat was his especial friend, the street loafer his admirer, and the frail lady his defender, but he never failed to respond to any call, for money appeared to be a secondary matter to him. It is said of him by both Dr. Hodgen and Dr. Stevens, that of all the men they had ever met that he handled the scalpel the most adroitly and efficiently; that no one could equal his touch with the knife, that apparently it was as delicate as down and as resilient as a breath.

Dr. McDowell was singularly proud of admiration and a strange admixure of assertiveness and real timidity. A friend of his stated to the writer that while he had lectured for many years before large classes of young men that when his time came to deliver his valedictory he was absolutely scared to death, and thus continued the writer's informant, the strangest part of all was that he braced himself to make this lecture by partaking of various potent libations, and full as he was his theme was nothing more nor less than his bitter opposition to the use of liquor. The doctor took a singular pride in shocking people by rough and profane language. Perhaps this was inherited. Frequently to the question, or rather to the salutation, "Well, doctor, this is an awful cold day." "Yes," he would say, "of course it is cold, but not half so cold as when Hades froze over in a single night." He was a lineal decsendant of Sir Francis Drake, a

son of Dr. Joseph Nash McDowell, and a grand-nephew of Dr. Ephraim McDowell.

Then to sum up this remarkable character it can be said, that no man was ever more dutiful to his function, and no man ever taught anatomy any more thoroughly and consistently than John Mcowell. His every element made him efficient in this line. His lack of dignity, his coarse language, his profane assertions, and his perfect and remarkable command of his subject, drew students to him in a manner few could equal. No matter what may have been his faults, and after all that which can be said, he was a remarkable, able and telling teacher, and a great benefit to the medical mind of the Middle West.

LARYNGEAL STENOSIS TREATED BY LARYNGOSCOPY.

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BALTIMORE, MD.

THE treatment of laryngeal stenosis has been simplified by the use of the laryngeal speculum. The instrument devised by Dr. Chevalier Jackson, of Pittsburg, is perhaps the best for the diagnosis and treatment of this condition in children. The great difficulty in young children has been to see exactly the extent of the obstruction. With the indirect mirror method all laryngologists know that the examination of the larynx in children is often a very difficult and unsatisfactory procedure. Even under anesthesia with the tongue drawn well out of the mouth, the diagnosis sometimes has to be guessed at from the fleeting glances which we are able to obtain. In these cases direct laryngoscopy is most valuable. The smallest larynx can be satisfactorily examined in a brief space of time with or without anesthesia. I believe the careful use of the speculum will prevent thyrotomy in many cases of stenosis in the future. The treatment of laryngeal stenosis through the tube is well illustrated by the following case: E. M., 2 years old, in December, 1907, had a severe attack of laryngeal diphtheria. She was intubated with metal tubes which she wore thirteen days. The intubation tube was removed several times, but each time had to be re-introduced to prevent suffocation. When the tube was finally removed, the child soon became cyanotic so that a quick tracheotomy had to be done to save life. From this time on she seemed to get little air through the larynx. About the middle of March, when she had been wearing the tracheal canula two months, she was brought to the Presbyterian Hospital for diagnosis and treatment. Under chloroform anesthesia Jackson's small laryngeal speculum was introduced, the epiglottis and base of the tongue pulled forward and the larynx inspected. The space between the true cords was entirely closed by connective tissue. Anteriorly a small probe could be passed into the trachea. A few days later the patient was again anesthetized and the new tissue cut through, using the knife through the speculum. A sea tangle tent was then introduced and allowed to remain for twelve hours. Two days later another tent was introduced and removed in sixteen hours. Attempts to dilate from below failed because new tissue had formed around the tracheal wound. The larynx was then cut through to the tracheotomy tube, after which dilators passed into the trachea and from below upwards into the mouth. A long intubation tube was introduced by the usual method and the tracheal canula removed. The patient breathed through the intubation tube twelve hours. There was then a rise of temprature to 104.06, and it was feared that pneumonia had developed. The intubation tube was removed and the tracheal canula again brought into use. The fever rapidly subsided which seemed to indicate that it was caused by the instrumental dilatation of the larynx and the pressure of the tube on the tissues. At present the larynx is well open and in a day or so the intubation tube will again be tried. If the temperature remains about normal, the tube will be retained by a piece of hard rubber screwed into it through the tracheal wound. It will be removed every five days to be cleaned and re-introduced. The tube will have to be worn for months, but it is confidently believed that this method of treatment will give the patient breathing space through the larynx and save her a thyrotomy. In older children the treatment will be much easier to carry out, because of the large size of the larynx. The treatment is simple and can be used at any age. The stenosis can be distinctly seen and divided through the speculum. The operation is not so dangerous as thyrotomy.

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FIFTEEN HUNDRED DOLLARS is offered as a prize for the best essay on "The Relation of Atmospheric Air to Tuberculosis." The article is to be submitted at the meeting of the International Congress on Tuberculosis which meets in Washington, September 21 to October 12, 1908. The cause, spread, prevention and cure of the disease may be included in the context of the subject.

GASTROPTOSIS.*

J. M. BELL, M. D.

ST. JOSEPH, MO.

THIS is one of the unsatisfactory conditions we meet in medicine, not the sort of a case to make a reputation on, but it does exist, and has to be met. The normal angle of the stomach is a subject much discussed, variously settled and still undetermined; like all an malies, there is a large margin, the whole arc of which may be within the pale of normality, or at least the extremes only, be beyond.

Pfahlar, of Philadelphia, has attempted to solve the problem by means of X-ray, using large doses of bismuth in the stomach to make the shadowgraph. He examined thirty-one healthy persons in the upright position since that is one we normally assume. In fourteen he found normal stomachs; all others (17) presented gastroptosis to a greater or less degree, he concludes, to cut a long story short, that the stomach, when empty, or moderately filled, occupies a position in the left abdomen, the upper two-thirds being almost vertical; the lower third nearly horizontal. The pylorus on line with the lower plane. Several European investigators have pursued this line of experiments with similar conclusions. The conditions which develop gastroptosis usually exert their influence upon all the abdominal viscera, so that a pure, uncomplicated lesion is seldom seen. The condition is practically always concomitant to a general enteroptosis, and constitutes what is known as Glenard's disease. The condition has been described by Virchow, Leuba and others, but Glenard is entitled to the credit of presenting it as an entity, based upon philosophic observations and ductions. He describes the digestive tract as a tube from the mouth to the anus fifteen times longer than a straight line connecting both extremes, arranged in the form of festoons, suspended by six loops, by means of ligaments from the posterior wall of the abdomen. The gastro-duodenal, ileocolique and the coloque transverse, costo-pyloris and the pylorocostal and colosigmoidal.

The ligaments are not all of equal strength and the points of fixation of several of them are especially weak. This is true of the gastro-duodenal and transverse coloque ligaments, is therefore apparent that the possibility exists that the weak ligaments, under favorable conditions may give way and a falling of that part of the intestine may result.

This naturally exerts increased traction on the next fixation point and causes an obstruction to the passage of the contents of the intestine.

More than this it deprives the upper loop of some of its natural support and it gives away more easily. The process continues from step to step until the whole digestive tube sags, bringing with it the kidneys, fixing the uterus, dragging down the liver, until we have the charcteristic abdominal outline of gastroptosis, hollow above the umbilicus and bulging below.

Nothnagel declares "no corset, no gastroptosis." This is microscopic criticism. The keynote of causation is a weakened abdominal wall, plus general debility. It is most common among women, because the two most frequent etiological factors enter into their lives, viz: The corsets and pregnancy. All conditions which develop sudden great loss of flesh, no matter what may be the cause; or any abrupt changes in the volume of the abdominal cavity, may develop it. It is found in tubercular persons of relaxed spine and stooped shoulders. Movable kidney is considered by French writers an habitual satellite of enteroptosis. A floating tenth rib is so persistently associated with it as to be regarded as pathognomonic. Among a large number of cases I saw in Chicago last year this anomaly prevailed.

Symptomatology.—A striking feature of Glenard's diseases, like many gastro-intestinal disease is that an enteroptosis may exist to a distinct degree and give rise to no symptoms until a general lowering of vitality or disturbance in the chemic relations of the stomach and uodenum quickly developed the entire role of symptoms. Again, a general enteroptosis may exist and reflect itself only upon the kidney or some one of the intestinal loops. The symptoms are described by the patient as those of a vague dyspepsia and let me say, parenthetically, will be treated as such and the enteroptosis be lost sight of unless a physical examination is made. There is some faintness or weakness after rising, a sense of fatigue after exertion, a dragging in the lower abdomen, a sense of weight and pulling at the epigastrium. Constipation exists with flatulence. With it all there are distinct evidences of disturbed digestion which do not respond to remedies. This is so frequently the case that the immediate condition is not discovered until late in the course of treatment, when a careful examination reveals relaxed abdomen, full below, flat or saggy above the cavity apparently too large for its contents. The most common difficulty lies in distinguishing this condition from

* Read before the St. Joseph-Buchanan County Medical Society, June 24, 1908.

dilatation of the stomach. Locating the greater and lesser curvature will determine the difference. In dilatation, the lesser curvature remains in the epigastrium, while the greater curve descends below the umbilicus.

In gastroptosis, both curvatures are prolapsed. The fundus may be actually in the pelvis, while the lesser curvature is at the umbilcius. The diagnosis, as outlined by Einhorn, is made by the splashing sound, by inflation of the stomach and by gastro-diaphany. The most convenient one is the splashing sound, elicited by tapping the viscus at the left side of the abdomen, or by vigorously shaking the abdomen. Turck uses the gyromele for this purpose. The procedure consumes only a minute and is preferable to inflation, either by CO_2 or air. The only drawback to the inflation scheme is that a relaxed pyloris allows the air to fill the duodenum before percussion is carried out. The stomach outlines are then merged into those of the duodenum.

Treatment.—During the lying-in period, more attention should be paid to proper bandages for weakened recti muscles, and a slower return to a full diet, while the stomach walls, as well as all intra-abdominal ligaments are weak. One of my recent cases, a pure gastroptosis owes its origin to indulging a fierce appetite during the first week. The proper treatment of Glenard's disease is largely mechanical. Patients forced to lie in a horizontal position for sometime recover from gastroptosis. Rest cures that compel patients to lie in bed with forced feeding to deposit fat in the abdomen, cure gastroptosis, providing serious relaxation of the abdominal muscles is not present. I get best results when patients consent to get off their feet, go to bed for ten days or two weeks, with diet restricted almost entirely to carbohydrates. Meals small, frequent and dry. The less weight the better. Hence soups, brothers, etc., are interdicted. They contain so little nourishment for their weight. Carbohydrate diet is preferable in this disease because of its shorter sojourn in the stomach. It begins to pass the pylorus in thirty minutes, and within an hour is gone while proteids require from one and a half to three hours or even four. Next to diet and rest comes massage. Proper scientific massage of the abdominal muscles contributes materially to restoration. This is done daily for at least two weeks, after that, at greater intervals for a month or two longer. In this connection I must mention cold abdominal douches, the affect of which is perceptibly tonic. Electricity, dashed faradic, has a psychic, and perhaps some real influence. Lavage is not generally recommended, still I find it of material assistance in establishing tone to the motor function—peristalsis.

Since some general debility is always present, elixir of Iqs. or hypophosphites is given. Where serious pouching exists, bandages must be used in the early treatment, not to be depended upon long, but to assist in getting rid of that vicious cycle stasis, constipation, indigestion and absorption of products of decomposition. They are to be applied in the horizontal position, and if necessary, with protruding hips, an air cushion can be used next the skin to elevate the viscera. These are necessary particularly in ambulatory cases of severe type, they are made preferably of rubber, knit, like those for varicose veins. Landau, Rosenheim and Bordenhauser have written extensively upon the bandage and advocate it. Surgical intervention has proved of no avail. Mayo, Turck, Boas, and gastroenterologists generally, have abandoned it. They depend on dry diet small meals, carbohydrates and fats, rest, massage, cold abdominal douches, lavage and the pad.

Acute cases will recover in four or six weeks; chronic ones take longer. One point must be kept constantly in mind by the patient, that is, small meals and dry for several months until the parts regain full tone. Such cases should be kept under observation for several months after all symptoms have disappeared, to guard against relapse.

SCOTCH women are creating considerable agitation in Edinburgh demanding admittance to the medical classes of the university, but the faculty and student body generally are greatly opposed to the innovation. Medical instruction of women was, until recently, given by the faculty of Minto College, which lately disbanded, leaving about one hundred women without school facilities.

THE recent report of Chicago Pasteur Institute discloses that since 1890 three thousand one hundred thirty persons have received treatment, and that of this number but seven succumbed. Dog bites were responsible for two thousand seven hundred seventy-nine of the cases; thirty-eight were infected by human beings and the remainder by some animal other than the dog. During 1908 the Berlin institute handled two hundred and thirty-four cases, with but four deaths. Of this number sixty-seven per cent of the diagnoses were confirmed by animal inoculation and the remaining cases were so obviously rabid that no inoculation was made.

SELECTED ARTICLE

DEMAND FOR AN OPEN CHANGE OF ATTITUDE TOWARD THE SOCIAL EVIL.*

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THE value of Preventive Medicine of the human race is readily acknowledged in regard to smallpox, diphtheria, scarlet fever, typhoid, tuberculosis, etc. The success with which the fight against these diseases has met has been due to two facts: First,—an active appreciation of their effects and causes by the medical profession. Second—an honest realization by the public at large of their danger to the community. Unless the mind of the average man and woman acknowledges to itself that such and such an attitude towards a disease is for their common welfare it will be difficult, if not impossible, to enforce that attitude, and, if medical men take an erroneous stand on a question of public health, they sacrifice more lives than the most hardened criminals.

The medical profession is responsible for one such grievous sin against society, i. e., the attitude of the average man towards venereal diseases. The prophylactic value of education has been applied to the prevention of almost all communicable diseases with the exception of this class—a class that poisons the very sources of the family, and the only class of contaigous diseases in which individual volition, as to exposure, can be applied. At all times the special knowledge possessed by the doctor in regard to these diseases has been strictly withheld social from the public. The only information he has given out for the welfare of society has been such as this: "Sexual indulgence seems to be a physical necessity for men." What man suffering from venereal disease is not familar with the jocose smile of the doctor, as he says, "Well, my friend, how's your little misfortune? No worse than a cold in the head, is it?" Or the worldly wise professional face as he says, "If you wish to get over this little gleet, you had better get married." These are the popular ideas today in regard to venereal disease for which our medical forefathers are responsible. We can excuse them only on the plea of ignorance.

Ignorance, today, is no justicfiation of the doctor's attitude. The serious nature and various forms of these diseases are being taught in all our medical schools. As to their prevalence, Dr. Belfield, in "Progressive Medicine," for December, 1907, is inclined to believe it has been exaggerated; but statistics are now being carefully collected for the first time in this country, and are most alarming. Dr. Hooker of the Johns Hopking Medical School, and chairman of the committee appointed by the Medical Faculty of Maryland on Sanitary and Moral Prophylaxis, has recently collected the statistics of Baltimore for the year 1906. For this year there were treated by private physicians 3,090 cases, and by hospitals and dispensaries 6,360 cases, making a total of 9,450 cases of professionally treated venereal disease. During the same year there was reported to the Health Board 575 cases of measles, 1,172 cases of diphtheria, 577 cases of scarlet fever, 175 cases of chicken pox, 58 cases of smallpox, and 733 cases of tuberculosis, making total of 3,310 cases. Thus we see that, for every one of the common diseases popularly recognized as a menace to the community, there are three cases of venereal disease striking at the very root of the family, with no attention paid to them, the mere mention of which is prohibited by convention.

It is true that, for the past hundred years, the Continental countries have attempted to cope with the subject. The crusade has been made against the prostitute as being the most prolific source of contagion. Since she could not be exterminated, they determined to regulate her by the system known as Reglementation. In general outline, this system requires all prostitutes to register and to report for medical inspection from once to twice a fortnight. If found diseased, they are placed in lock hospitals until recovery. Berlin and Paris have tried this system exhaustively. There is a strong feeling among many in America that it has proven a panacea for the social evil, and for their benefit it is very necessary for medical men to assure them of its absolute failure. Since there are some perhaps who are loath to give up the idea I will enumerate the causes of this failure.

1. For the fundamental reason that of the two propagators of the disease you only recognize and treat one. As Dr. Charles Bell Taylor says, "What would you think of our Medical Health Officer if he proposed to stamp out scarlet fever by segregating girls, while little boys in infected condition, mind you, were sent to school, or allowed to play about the streets? What would you think of him if he proposed to limit smallpox by vaccinating females only? A sanitary law applicable to one sex is not only a cruel injustice, but a mockery and delusion."

2. For the actual fact that a very small percentage of the prostitutes can be made to register and submit to inspection, under the model police system of Paris. The West-

* Yale Medical Journal, February, 1908.

minster Review from December, 1899, p. 608, reports that of 300,000 prostitutes in Paris only 3,060 are on the registration books—a fraction over 1 per cent.

3. Now this 1 per cent is examined only once a fortnight in Paris and twice a fortnight in Berlin. A woman might become infected the hour after her examinations, and yet her certificate of health given by the government could be shown to her patrons until the next examination.

4. Because of the practical difficulty of making a negative diagnosis by a single hurried examination.

5. Because of the practice of women, who fear a positive diagnosis, presenting themselves during menstruation in order to prevent examination.

6. A woman having had syphilis, presents no symptoms of the disease, but may spread the disease by mediate contagion.

7. The lack of serious co-operation between prostitute and physician; the one presenting herself against her will, the other usually becoming a political money maker subject to bribery and debauchery.

8. The opportunity to abuse women by unscrupuous officers. All that is necessary to forcible registration is "the opinion" of a policeman. The many pitiful incidents on record of sacrifice of reputation and even life through the unmerciful act of ministration of registration would in themselves stamp the system as pernicious.

The next two reasons against reglementation are to show how it causes an actual increase in venereal disease.

9. By producing a false sentiment of security, many who would control themselves for fear of disease are relieved of their chief objection to illicit sexual indulgence.

10. Any system of Reglementation, by no amount of sophistical discrimination, cannot conceal the fact that it makes of prostitution a legitimate industry. It becomes an industry subject to regulations, in behalf of its patrons, identical in nature to the early regulations as to the weight of the loaf of bread or the size and quality of the yard of woolens. State recognition of prostitution as such a necessity, would unquestionably tend to confirm the already common opinion that secret indulgence is an imperative need. Before leaving the subject of Reglementation it is but fair to say that already several of the Continental countries have abandoned it, others are planning to do so. In regard to France, Fournier characterizes the system as "insuffissante, impuissante, et caduque." "Has syphilis," he says, "ever diminished in frequency during the forty years that I have made it the subject of my investigations? It is impossible for me to believe that it has after what I have seen with my own eyes. Has it, on the contrary, increased? I, myself, firmly believe that it has done so." Yet Fournier was forty years ago a strong advocate of state regulation. At the "Conference Internationale" in Brussels, 1899, Neisser expressed his opinion "based upon studies, continued, I am almost sorry to say, through years, that one cannot prove by statistics the effect of regulation of prostitution upon the spread of venereal disease."

Figuratively speaking, is the prostitute a real disease, or merely a symptom? In the last analysis of the question she is merely a symptom, and the real disease against the welfare of the community is the common idea of the "sexual necessity" for men. Hence it is not the prostitute, but the idea of "sexual necessity" that must be combatted. To many, a fight along such lines seems hopeless. They find it impossible to refute their own personal experiences. Such men are wont to compare the sexual instinct with the instinct of hunger and thirst, but there is no proper parallelism between the two, as food and drink are vital necessities. It presents a closer analogy with the appetite for alcohol and certain forms of drug addition, which have been artificially cultivated by the habit of indulgence. The testicle is a gland like the tear gland, largely under the control of emotional influences. It is not concerned in the ordinary actions and doings of everyday life. If one indulged every emotion of pain or sadness by weeping copiously once a week, or oftener, from the age of fifteen, at twenty-five it would not be surprising if he considered the shedding of tears a necessary accompaniment to any sensation of personal injury. The attitude of the stoic would seem to him impossible. Fortunately there are enough sexual stoics to prove by practical experience that continence is possible. We do not have to go to comparative physiology to prove this point. That continence is not only possible but is compatible with excellent general health may be positively affirmed. It is a noted fact that scholars, athletes, artists, and any who are occupied with arduous mental and physical labor do their best work when they refrain entirely from sexual intercourse.

That continence is not injurious to the sexual organs is the clear and definite teaching of modern medical science. Dr. Keyes of New York City, says, "To leave the theory and opinion, and come down to matter of hard fact, capable of physical demonstration, it may be safely and surely affirmed that no amount of continence ever caused atrophy

of the testicle. If continence, too long continued, can produce impotence, that fact should be evidenced by a wasting of the testicle, and I confidently assert that this is never the case. On the contrary, atrophy of the testicle to a greater or less extent very often follows prolonged sexual abuse." Fournier of France says, "Referring to the so-called dangers of continence, I do not know them, and have never observed them."

Continence is therefore not only possible but is compatible with the sexual health, and it is in no way injurious to sexual vigor. These facts it is the duty of every medical man to give to the public. They must be the basis of any prophylactic education for the prevention of venereal disease, just as the necessity of fresh air and sunshine has been the basis of education for the prevention of tuberculosis.

This is merely the foundation of education. The mere command, "Thou shalt not," has nerve seriously held in check a human instinct unless the large majority of individuals composing the community has acknowledged to him or herself the real danger to society of the lack of such a control. In this way have arisen all of our moral ideas. Few individuals of a community do not acknowledge to themselves that the unrestrained human passion resulting in murder is a menace to society, or that stealing and lying are absolutely inimical to our industrial welfare. The importance to the family of the chastity of women has been recognized from earliest history. In our western Tutonico-Christian civilization monogamy has been declared for men, yet who will deny that the vast majority of men have, at one time or another in their lives lived in polygamy. Now why is there this dual standard for men and women? It is because the average man in his heart of hearts does not acknowledge to himself that there is any competent reason why he should control his sexual passion. Beyond the sentimental idea of the justice of men's remaining chaste, if they require it of women, he does not see how secret indulgence is going to be of any real injury to his family and the community. Now here is where the responsibility of the medical man comes in again. He has got to open the book that has heretofore been kept sealed from public inspection. The dangers of incontinence have got to become generally known to men and women, even boys and girls, before public attitude productive of any results against venereal disease will become manifest. Education has got to come first; and, to attain this education, the public has got to have the facts. It is no less than criminal to speak of gonorrhea as "a little misfortune no worse than a cold in the head," and leave unrefuted the idea that "marriage is the best cure for an annoying gleet."

How many of the public realize that, of every thousand men married in New York City eight hundred have or have had gonorrhea, and that 90 per cent of these marry uncured? (Noeggerath). Most men have in their hearts the ideal of bestowing their best love and protection on the women they marry. Now how many of these men, I say, would relish the fact that 20 per cent of syphilis occurring in women of all classes has been conjugally communicated by loving protecting husbands (Fournier), and that gonococcic infection is responsible for 60 per cent of all gynecologic operations performed by surgeons? (Dr. Grandin of New York). Do you suppose the legislators, who framed the statutes making the production of abortions by physicians such a danger to the State's weal that it is punished by imprisonment and a heavy fine, understood that 62 per cent of all miscarriages and abortions are due to venereal disease? (Dr. Prince A. Morrow). What could be the attitude of the overburdened taxpayer towards incontinence and venereal disease if he realized the percentage of bastards in our criminal and pauper class, or the number of syphilitics in our insane asylums, or that thirty per cent of the blind children he is supporting are state charges because of gonorrheal ophthalmia? The love of children is one of our strongest human instincts, yet few disappointed fathers and mothers realize that the husband is responisble for 20-25 per cent of sterile marriages because venereal disease has rendered him incapable of procreation, and, as the husband, though not sterile himself, may infect his wife, rendering her sterile, he is ultimately responsible for 70-75 per cent of all sterility in married life (Lier-Ascher).

These are a few of the dangers to the community of the social evil that the medical man should teach the layman. If each individual layman realized all of these dangers, I am not such a pessimist as to doubt that the great majority would accept in their souls the moral necessity of continence in place of the sexual necessity of incontinence. All evolution is slow, but I am firmly convinced that such an attitude will evolve sooner or later. To hasten this evolution the medical profession should hold itself responsible for enlightening the public as to the possibility and healthfulness of continence, and the disastrous effect on the community of a lenient attitude towards a youth "sowing his wild oats."

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EDITORIAL

The Status of the Dog.

IN spite of the fact that many of our readers declined to take as seriously meant an expression of opinion which appeared in these columns some month since relative to the position of the dog in the community, his existence is recognized as a serious problem in many parts of the country, and there is a growing inclination on the part of those who interest themselves in the subject to regard his presence as a definite menace and his elimination as a desideratum. It is within our memory when there were medical authorities who denied any connection between the dog and hydrophobia; we distinctly remember a learned dissertation in which it was claimed that fear caused the disease rather than any definite infection; we have comparatively recent bacteriologic discoveries to thank for the complete clearing of the etiology of the disease and it is doubtful if there is a physician anywhere today who questions its origin. There are fortunately few physicians who have seen cases, but those who have will agree with us that such suffering on the part of even the lowliest of human beings abundantly would justify an active campaign for the elimination of dogs even were the benefits from their presence much more manifest than they are.

The editor of the Post-Graduate comments on this subject* in the recent death of a prominent New York citizen, while he is not so sweeping in his views on elimination as we have been, he presents the subject as it appears to him, and as he would have the New York profession, and his readers see it. He says:

"The recent death of an important citizen from hydrophobia has again attracted the attention of the public toward that subject, and renewed efforts are being made for eliminating useless canines. This will cause very little hardship, because dogs that are well cared for, by fond masters, are not very apt to be exposed to the attacks of the rabid dog in the wandering stage of his disease. On the other hand, the pet dog that has been bitten is particularly dangerous, because he is apt to be demonstratively affectionate, and run to his master for sympathy in the first stages of the disease. Rabid dogs, as a rule avoid people, and seek to hide. They even avoid attacking domestic animals in many cases; but the sight of another dog immediately provokes furious and uncontrollable desire to bite. Worthless curs, abounding in many localities, are most often exposed to such attacks, and it is this class of dogs that needs attention on the part of public officials. In every town, a fund should be provided for politicians to divide —the rest and residue to go toward ridding the country of dogs which have no secure attachments. The dog which the boy needs for helping him to get woodchucks out of the stone wall, and the pet of the little invalid girl, will not often be found in the mesh of the collector, when it is definitely understood that dog catchers are always about. A very high tax on female dogs will have a tendency to lessen the number of dogs of the class that are valuable on the ground that each individual possess so many kinds of ancestors."

* Post-Graduate, July, 1908.

President Roosevelt and the Antituberculosis Campaign.

THE versatility of the present President of the United States and the multiplicity and variety of interests in which he is intelligently concerned marks him as an unusual man. Were he in the coming campaign the medical profession would have abundant reason to espouse his cause, for he has on numerous occasions shown himself informed and interested in matter vital to medical progress. During his administrations the development of medical and health phases of the Government's endeavors have eclipse anything in the past and that in the face of complex and unusual problems, such as come with the bringing of the Philippines and Panama in the consideration; the President has ever considered the best as none too good, and this shows in the success along health lines.

We have read many letters from the President with interest, but none recently uttered by him has seemed more forceful than tha in which he accepts the Presidency of the "International Congress on Tuberculosis;'

it shows that he is entirely conversant with the tuberculosis subject and considers it one of the important problems of the present day. His co-operation must prove encouraging to those who must do the detail work, and it must impress others who are as yet uninterested that the situation is one which calls for their active support.

The letter of acceptance reads as follows:

Dated at the White House, Washington.

To Dr. Lawence F. Flick, Chairman, Committee on International Congress on Tuberculosis:

Sir:—It is with great pleasure that I accept the presidency of the "International Congress on Tuberculosis" which is to meet in this city September 21, 1908, and extend its session to October 12, 1908. Official duties, however, may prevent my presiding at the initial meeting of the Congress, in which case I will deputize Secretary Cortelyou.

The importance of the crusade against tuberculosis, in the interest of which this Congress convenes, cannot be overestimted when it is realized that tuberculosis costs our country two hundred thousand lives a year, and the entire world a million lives a year, besides constituting a most serious handicap to material progress, prosperity and happiness, and being an enormous expense to society, most often in these walks of life where the burden is least bearable.

Science has demonstrated that this disease can be stamped out, but the rapidity and completeness with which this can be accomplished depend upon the promptness with which the new doctrines about tuberculosis can be inculcated into the minds of the people and engrafted upon our customs, habits and laws. The presence in our midst of representatives of world wide workers in this magnificent cause gives an unusual opportunity for accelerating the educational part of the program.

The modern crusade against tuberculosis brings hope and bright prospects of recovery to hundreds and thousands of victims of the disease, who under old teachings were abandoned to despair. The work of this Congress will bring the results of the latest studies and investigations before the profession at large and place in the hands of our physicians all the newest and most approved methods of treating the disease—a knowledge which will add many years of valuable life to our people and will thereby increase our public wealth and happiness.

The International Congress on Tuberculosis is in the interest of universal peace. By joining in such a warfare against a common foe the peoples of the world are brought closer together and made to better realize the brotherhood of man; for united interest against a common foe fosters universal friendship. Our country which is honored this year as the host of other nations in this great gathering of leaders and experts and as the custodian of the magnificent exhibit which will be set up by the entire world, should manifest its appreciation by giving the Congress a setting worthy of the cause, of our guests, and of ourselves. We should endeavor to make it the greatest and the most fruitful Congress which has yet been held, and I assure you of my interest and services to that end.

With expressions of appreciation for the compliment conferred in extending the invitation to become president of the Congress,

Very respectfully,

THEODORE ROOSEVELT.

RECENTLY a severe penalty was imposed on a French pharmacist, who by mistake in dispensing, had been responsible for the death of a customer. The judge, besides fining him $120, compelled him to pay the funeral expenses of $400 and an annuity of $160 to a relative.

CHOLERA IN MANILA.—The quarterly health report of the Philippines states that there were 203 cases and 167 deaths from cholera in the city of Manila, and 806 cases and 628 deaths in the provinces during the first quarter of the year. It is believed that real progress has been made during the last few months in the study of the etiology of the disease. It appears probable that cholera has become endemic in the city of Manila, and that the outbreaks in the provinces are usually due to infection wihch comes to that city.

CORRECTION.—Through an error in which the FORTNIGHTLY had no responsibility, there appeared in our issue of May 11th a very interesting clinical report under the title, "Syphilitic Lobar Pneumonia," which was credited to Dr. J. A. Henske, the paper was written and read by Dr. F. F. Zelle. The error was due to notations made by intermediaries after the paper left the hands of the author and before it reached us. It is needless to say that we deeply regret that the mistake was not sooner discovered, and for the responsible party, we express apologies to both gentlemen. Dr. Henske's article on "Chronic Suppurative Pancreatitis," which was read at the same meeting of the Hospital Society, will appear in an early issue.

MEDICAL PROGRESS

Comprising the Regular Contributions of the Fortnightly De partment Staff.

INTERNAL MEDICINE.

O. E. LADEMANN, M. D.

A Clinical Study of General Anesthesia.—Blain (N. Y. Med. Jour., May 9, 1908) discusses the various anesthetics and their methods of administration. He says the following concerning their use: Chloroform is a dangerous drug and should be totally eliminated from the armamentarium of the surgeon. The so-called morphine-hyoscine anesthesia is unscientific and dangerous. The comparative safety of ether and chloroform cannot be based on our present statistics, but one point, is certain; chloroform is always dangerous, while ether given with a comparative amount of skill, is absolutely safe; nitrous oxide as a general anesthetic is occasionally of value, but its use is extremely limited, as good results can be obtained in these cases where gas is used by ether, if the latter is given with the same amount of skill as is necessary in giving the gas. The anesthetist should pay more attention to his patient, and the surgeon give more consideration to the duties of the anesthetist. The indications in a surgical operation are for ether and the contraindications are nil.

The Management of Self-Limited Disease.—Konkle (N. Y. Med. Jour., May 30, 1908) holds that the term management indicates direction rather than coercion; influence rather than usurpation; promotion of recovery rather than cure. It is not exclusive of the idea of specific treatment of disease. In every case of self-limited disease rest and sleep should be given careful attention. To this end pain of a degree that is distressing and exhausting should be controlled. Of course the heart should be assiduously, untiringly watched. A consideration of vital importance is the efficient performance of their functions by the emunctories—this cannot be over-emphasized. Nutrition should be looked after; but here again natural indications should be closely studied—we should be careful not to eat when nature says fast. Water will be the indispensable food. It is a serious matter to administer a really active dose of a potent drug. To do it intelligently is eminently proper. To do it at random is eminently reprehensible. In the management of a case of self-limited disease, immediately after the requirement of an adequate acquaintance with the natural history of such disease, comes the obilgation to see that this natural history be normally developed. The single but solemn duty of the doctor here is to have the disease keep its due course, or maintain its symmetry. He can do no more than that he should try to do no more. His province includes no less than that; he should aim at no less. As a corollary of his obligation to see that these diseases hold their course stands the further obligation to not interfere when that course is being followed. Symptom tinkering is extremely pernicious, can do naught but harm, where a proper balance or proportion between the symptoms already exists. In illustration take temperature. Not so long ago it was thought good practice to depress exalted temperature, regardless of its relationship; now it is coming to be considered a useful factor, and its deficiency within bounds is due.

Harmless Albuminurias.—Williams (Clinical Journal, London, April, 1908) says albuminuria may be due to a great variety of causes, both physiologic and pathologic, of which structural disease in the kidney, forms but a small, if highly important, minority. The majority of the cases are either due to altered blood states, or to failure in the normal vasomotor mechanism. This failure may manifest itself in one of two directions. In the first, chiefly by some means so far undiscovered, the blood pressure in the splanchnic area rises, and is maintained, at a sufficiently high level to induce a renal plethora and consequent albuminuria. Of such are the cases of hyperiesis, as in the instance quoted. In the second place, owing to a local or general vasodilation, the blood pressure in the splanchnic area falls to the point at which a renal stasis is induced. Of such are the cases of cyclical, postural and athletic albuminuria of which also instances are cited, cases which for the most part occur in young adults, in whom the vasomotor response is either undeveloped, or for some reason is inadequate. The author emphasizes that albuminuria of itself not only affords no evidence of renal disease, but does not even present a reasonable suspicion of the existence of such disease any more than dyspnea presents a reasonable suspicion of cardiac disease.

Origin of Urinary Casts.—Smith (Boston Med. and Surg. Jour., May 9, 1908) made a series of investigations on animals with renal lesions superinduced by the administration of uranium nitrate, potassium bichromate, trypan red arsenic and cantharidin. From these experiments he concludes, that granular casts are the first to appear when the kidney is attacked by an irritant. Casts arise from the degeneration and necrosis of the cells of

the tubular epithelium of the kidney. Entire necrotic cells may desquamate, and at first remain distinct from one another, then become massed together, and finally formed into a definite plug, taking the shape of the tubule in which it is formed. The same process takes place with cell fragments and granular material derived from disintegrated cell. The casts are all granular at first, and later become hyalines they pass down the tubule in the urinary stream.

Tobacco and the Heart.—Mitchell (Lancet Clinic, June 13, 1908) summarizes his article as follows: 1. Many men can smoke a lifetime without manifest injury. 2. Excessive smoking is always injurious sooner or later. 3. What constitutes "excess" differs with the individual; some men bear tobacco so badly that they should avoid it altogether. Two cigars a day may be excess for one man, while another observes no special effects from several. 4. In some individuals, ill-effects from smoking are not observed until many years of indulgence, when gradually, or sometimes suddenly, he realizes that he customary smoke produces some irregularity, palpitation, angina or other disturbance. 5. In the immature the use of tobacco in any form is highly injurious, interfering with the normal development of the mental powers, producing various nervous disturbances, especially nervous disturbance of the heart, as manifested in palpitation, arrhythmia and weakness. 6. Cigarette smoking, as seen in this country, is more injurious than either pipe or cigar and more difficult for the victim to abandon. No doubt the principal reason for this is found in the common habit of inhaling the smoke. The nasal cavities present an enormous surface of mucous membrane so that in the practice of inhalation more nicotine is absorbed. In addition there is the fact that from the short, loosely packed cigarette practically all the nicotine is taken hot into the respiratory passages. In the tightly rolled cigar the smoke has more time to cool down, and much of its alkaloid is deposited in the but of the cigar. In the pipe the smoke is cooled and the nicotine deposited into the stem. Another reason why we more frequently see pernicious effects from cigarette smoking is the fact that it is the common form of smoking in the early years of life. 7. The characteristic symptoms of tobacco heart are palpitation, irregularity, irritability, anginal pains, absence of organic murmurs, prompt recovery, abandonment of the habit. Pseudoangina pectoris is not infrequent.

The Calmette Ocular Reaction to Tuberculin.—Parker's (Jour. A. M. A., June 27, 1908) article embraces an extensive literary resumé with the following conclusions based partly on his personal observations: 1. The calmette ocular tuberculin test is of as great diagnostic importance as any other single test. 2. A positive reaction is indicative of a tuberculous focus somewhere in the body. The test is uncertain in persons under two years of age, in whom the cutaneous test of von Pirquet is most certain. 4. The test fails in advanced cases of tuberculosis, but there is little need of it there for diagnostic purposes. 5. The initial instillation should be perfectly under 1 per cent strength, in order that severe inflammatory conditions may not follow its use. 6. If necessary to make the second and stronger test the instillation should be made in the eye not previously used. The consensus of opinion seems to be against using the test in an eye not wholly normal. 8. After complications have occurred from the use of the test, but these have entirely cleared up in a varying length of time. These conditions are not so frequent when the initial test is made with solution under 1 per cent in strength. 9. Recent investigations have shown a greater number of ophthalmic affections due to tuberculosis than formerly supposed, and in the calmette reaction we have a simple means of differential diagnosis which should be thoroughly tried. 10. The ocular reaction is especially valuable for ascertaining the tuberculous nature of cases of phlyctenular keratitis and conjunctivitis, episcleritis and scleritis, chronic iritis and iridocylitis, interstitial keratitis and chorioiditis. 11. A 1 per cent solution of Koch's old tuberculin is nearly as good as the Calmette solution for diagnostic purposes. 12. The test in the hands of the various observers has given uniformly excellent results that its value is practically assured.

OTOLOGY.

A. F. KOETTER, M. D.

Examination of the Blood in Acute Middle Ear Inflammations.—(Ira S. Wile, Amer. Jour. of Surg.).—In acute serious middle ear inflammation there is a moderate leucocytosis (10,000-15,000). In purulent middle ear inflammation the white blood cells may number 40,000. Of special diagnostic value is the blood examination in doubtful cases of mastoiditis, in which the number of neutrophile polynuclear cells may reach 73-98 %, the more extensive the destruction the higher the percentage. The percentage is especially high in intracranial complications. Is the percentage less than 77% intracranial com-

plication is improbable, if more than 86% it is probable. A reduction in the number indicates an improvement. If on the contrary, the total leucocytosis is diminished without at the same time a decrease in the percentage neutrophile polynuclear leucocytes, it indicates, especially in children, a low vitality of the organism, and in such case operation should be performed immediately. In chronic middle ear suppuration there is in 25% of the cases a slight increased leucocytosis, especially where there is pus retention. Brain abscesses conduct themselves the same as abscesses in other parts of the body and seldom cause a severe leucocytosis usually (14,000-17,000). In purulent meningitis there is usually a severe leucocytosis (20,000-60,000).

Two Cases of Suppuration in the Temporal Fossa Following Middle Ear Suppuration.—(H. Gifford, Omaha, The Laryngoscope.)—Case I.—Girl of seven with left sided otitis; after a few days swelling above and in front of ear. Author saw patient for first time a month later. There was present severe swelling along the zygomatic process extending to the eyelids. Temperature 103 deg. F. Two incisions evacuate large amount of pus. Temporary relief, after ten days again fever and swelling. A renewed incision again evacuates pus. Two days later mastoid operation pus in the antrum, but no involvement of the cells. Case. II.—In the course of an acute otitis media, in a boy of seven, with a perforation in Shrapnell's membrane, there appeared a swelling in the region of the ear. An incision, an inch in length over zygomatic process, evacuated pus. Recovery. A year later renewed attack, recovery by use of hot poultices. Two years later another attack, pus found again in the temporal fossa. Recovery.

Regarding Acute Labyrinthitis.—(G. Alexander, Archiv fuer Ohrenheilkunde).—Report of four cases of chronic middle ear suppuration, in which following a radical operation, symptoms of acute labyrinthitis appeared. In three cases the static labyrinth was intact before the operation, and only in one case there existed for a few days before entrance to the hospital, vertigo. In all cases there was present on admission, atypical normal irritability of the vestibularis, in three cases spontaneous nystagmus without vertigo and disturbances of equilibrium. In all four cases there appeared twenty-four after the radical operation, severe disturbances of equilibrium, vertigo and vomiting, to recur again in from five to seven days. In two cases meningeal symptoms occurred but rapidly disappeared. Recovery with restored function and typical irritability of the static labyrinth, in which this disease differs from the diffuse suppurative labyrinthitis, where after recovery the vestibular apparatus remains functionless and unirritable. Furthermore no labyrinth fistula existed in any of the cases and as an operative injury could be excluded, the author was justified in the supposition that he was dealing with an acute serous labyrinthitis, in which etiologically the operative opening of the middle ear cavity played the most prominent part.

Relation of the Chronic Progressive Labyrinthian Deafness to Meniere's Disease.—(Franz Alexander (Frankfurt a M.) and Paul Manasse (Strassburg), Zeitschrift fuer Ohrenheilkunde)—By Meniere's disease we mean certain labyrinthian symptoms, occurring suddenly and apoplectiform, and according to the observers exclusively in cases where there has existed an ear trouble in the form of a chronic, progressive, labyrinthian deafness. To illustrate this fact authors cite eleven cases in which for many years patients suffered with unilateral or bilateral chronic deafness, were suddenly stricken with a typical Meniere's attack with the well-known symptoms of dizziness, vomiting, tinnitis and increased deafness; an attack which usually recurred. As there was, in spite of marked middle ear changes (calcareous deposits, retraction, etc.), a labyrinthian deafness, which was shown by the pronounced decrease in the ability to hear the voice, the often diminished tone limit, the ever present shortening of the bone conduction and in most cases the positive abatement of Rinne's test. As has been shown by the anatomical examinations of G. Alexander Bruehl and Manasse we deal in those case with an atrophic respectively degenerative change of the nervous elements as well as new formation of connective tissue. Besides these well-known changes Manasse in two cases found multiple hemorrhages in the auditory nerve and labyrinth in the one case conspicuously numerous hemorrhages in the ligamentum spirale somewhat less in modiolusa large hemorrhage in the macula sacculi, especially numerous hemorrhages in the nerve trunks. To these hemorrhages in the described case may be traced the Meniere's symptoms. The exact proof of such a connection was demonstrated in a second case clinically observed chronic progressive, labyrinthian deafness with apoplectiform Meniere on which an autopsy was performed a few days later. Man, 52 years of age, deaf in both ears for five years. Suddenly vertigo falling down, unconscious for several hours; the following night severe nausea increased

tinnitis and vertigo. The next day continued nausea, tinnitis, especially in right ear, intense vertigo if slightest attempt is made to raise the head; sluggish pupil reaction, marked decrease in the hearing. Fourteen days later apoplexy with disturbance of speech, paralysis of the right side and rigidity of the left extremities, shortly after total loss of consciousness. Death that night. At the autopsy the ventricles were filled with a large amount of fluid and coagulated blood. Right ear: middle ear normal. Organ of Corti very low, consists of a one-half fold layer of cubic cells; stria vascularis thin; Reissner's membrane folded. Ganglion spirale consists only of a tough callous connective tissue with isolated, small lumpy ganglion cells. The delicate nerve canals in the cochlea are covered thick, light shining non-nucleated layer stains with eosin red. Same changes on the vestibularis, maculae and cristae acusticae flat; nerve trunks very thin. In the nerve numerous hemorrhages dividing the nerve fibers, and not only in the trunk but also in the extension in the cochlea and vestibule. The cavities of the labyrinth free from hemorrhages. On the basis of their observations the authors reach the following conclusions: 1. That in a nervous deafness comparatively frequent Meniere attacks appear. 2. That in a degenerative atrophy of the labyrinth multiple hemorrhages in the labyrinth and the auditory nerve are found. 3. That these cases are conditional on the hemorrhages. So far as anatomical examinations of Meniere's disease were made lately, they were nearly all leukemic, so that G. Alexander concluded that the Meniere's disease of the older authors was in all probability a leukemic condition, but from the examinations of G. Alexander and Manasse it is now certain that the true Meniere's disease does occur in non-leukemic patients.

A Case of Acute Middle Ear Suppuration Treated by the Opsonic Method.—(A. C. Magruder and C. B. Webb, Colorado Springs, The Laryngoscope.)—A man of 42, suffering with acute middle ear suppuration for three days; spontaneous perforation Pure culture of pneumococcus. Treatment according to the customary method for sixty-one days. By application of serum and agar cultures an opsonic index of seven is found. An injection of 14,000,000 pneumococci is made according to Wright's method. The discharge is diminished after several days and takes on a mucous character. A renewed injection of twenty million pneumococci. The next day the ear is almost dry and the day following entirely dry.

THERAPEUTIC TIPS.

E. S. McKEE, M. D.

Antiseptic Flexible Collodion.—The ordinary collodions not being antiseptic has militated much against their efficiency. The following formula which is a modification of Dr. Hopkins has entirely replaced the officinal flexible collodion at the Pennsylvania hospital. It is reported from that institution to be especially satisfactory in closing wounds and punctures, and as a protective covering after suturing in surgical operations. Gun cotton 4.00; alcohol 18.00; tinct. benzoin 9.00; sulphuric ether 75.00; mercuric chloride 0.50. Dissolve the gun cotton in the ether, shaking it till it becomes of the consistence of paper pulp; then add the tincture of benzoin and shake the mixture thoroughly. To this mixture add the alcohol in which the mercuric chloride has been previously dissolved.

Hay Fever Treated by Quinine.—Helmholtz who suffered intensely from hay fever found great relief, and sometimes aborted an attack by means of quinine solutions. Boesser improves this using a one per cent solution of corticin the most soluble of quinine derivatives. As soon as the stabbing pains appear the patient is to lie down and have one drop of the corticin solution dropped into the inner canthus of each eye. The fluid slowly trickles down the tear duct and all symptoms disappear. One dose usually suffices for four hours. When applied on retiring to rest at night relief will be obtained for the night and often the whole of the next day passed without distress.

The Treatment of the Opium Habit in the Philippines.—In the treatment of the patients at the San Lazaro Hospital at Manila it has been found that those who smoke opium give it up comparatively easily. Those who take it by the mouth relinquish its use with rather more difficulty, while those who are addicted to its use hypodermically suffer the most from being deprived and require a longer time to effect a cure. The cure of the opium smoker usually occupies less than a month, while the opium eater requires a much longer period, and at least sixty days for the hypodermic user. Two hundred and thirty-three patients have come under treatment and 186 have been discharged as cured. The Opium Law which was passed by the United States Congress, went into effect March 1st, 1908. During the year previous there had been a gradual increase of taxes on opium from month to month till the sale of opium not for medical purposes was prohibited. It was hoped that by this means the opium habitues

would themselves be compelled to reduce the amounts which they used. The government also made arrangements to treat any one free of charge and pay their transportation to and from the hospital who desired to be relieved of the habit. So far as possible to learn no great hardship has been caused by the withdrawal of the drug. True, quantities of the drug may have been brought into the islands before the law went into effect, and there are possibilities of smuggling.

The Treatment of Sciatica Surgically.—Dr. J. Crawford Renton presented to the Surgical Section of the Royal Society of Medicine of London, recently, a method of treating this unsatisfactory complaint, surgically, with a promise of better results than has been obtained from the past thirty years of nerve sretching. His patient was a medical man who had had his nerve stretched with scarcely any benefit. The patient having suffered much begged Dr. Renton to expose the nerve and at the same time extend his explorations to the popliteal nerve. Dr. Renton exposed the nerve by the usual incision and found it surrounded by adhesions extending up to the sciatic notch. One a large one was divide with the scissors and the others were stripped off. The popliteal nerves were exposed and found normal. The patient made an excellent recovery and was working and bicycling in a month, and has continued well up to the present time, now thirteen years. He has since operated on thirty-two cases. All have been benefited and remain well. Care should be taken not to stretch the nerve more than necessary to remove the adhesions. He thinks the best cases for operation are those in which pain is present when walking, but is absent when at rest. He found no trouble from the return of the adhesions if the thick ones are cut and the others stripped off.

The Treatment of Sciatica by Injections.—Schlesinger, in the Deutsch Med. Wochenschrift, reports the treatment of 42 cases of sciatica treated by his method. A single injection was followed by a cure in all but four cases. There are five acute cases, three of which required more than one injection. Two cases were in connection with diabetes and both were cured without any harm being done. In other forms of neuralgia he also obtained good results. These included supraorbital, trigeminal and intercostal neuralgias. In girdle pain in tabes he has also had good results. He first used cocaine in the solutions, but weakening them gradually he found that the effect was due to mechanical effects not pharmaco-dynamic action. He then employed saline solutions cooled down to below 0 deg. C. He does not try to inject the solution into the nerve sheath, as he realizes that this may be followed by accident. In mixed nerves as the sciatica, where the motor nerves might be attacked as well as the sensory it might prove harmful. On this account he is content with injecting the fluid in the neighborhood of the nerve trunk. He found that even extreme degrees of cold do not injure the vitality of the nerve tissue. He carried out his injections by first inducing a weal by injecting some of his cold solution under the skin and with a fine needle. He then inserted a coarse needle deep in the tissues injecting a little of the solution as the needle proceeded.

A Hospital for the Rockefeller Institute for Medical Research.—The board of directors of this institution announce the receipt of a gift of $500,000 from Mr. John D. Rockefeller, to be used for the erection and equipment of a hospital in connection with the institute. The hospital will be small compared with many others in the city, as its purpose is not so much to provide accommodations for the many as to furnish the means of studying the nature and treatment of individual cases, and thus develop new and more exact methods which may be applied elsewhere upon a larger scale. The hospital will contain certain elaborate provisions for the fresh air treatment of patient, and special departments of hydrotherapy and electrotherapeutics. It will contain private rooms as well as public wards, and a special diet kitchen.

A Substitute Which is an Improvement.—How frequently we hark back to something very like what our grandparents used and find it just what we wanted. We are doing this in the matter of surgical dressings. It is not so long ago that old linen was about the only available surgical dressing and was saved as precious; this was supplanted by cotton fibre which has been universally used for many years, but which has been recognized as far from the ideal, its deficiencies were overbalanced by the fact that it was cheap. Recently linen has been effectively prepared by a new process which makes it certain to largely supplant cotton, for it has many advantages over cotton. Oxolint is prepared for the market in sheets admirably suited to the purposes of the surgeon, it is sterile, fine fibred and as soft as the old linen we used to know. At the same time it is not an impossibility from financial considerations.

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Contributions and books for review should be addressed to the Managing Editor, 319 and 320 Century Building, St. Louis, Mo.

MEDICAL MISCELLANY

THE central committee of the International Congress on Tuberculosis has announced a list of prizes to be given for research work. The Hodgkin's fund prize of $1,500 is the principal one, the subject to be written on being "The Relation of Atmospheric Air to Tuberculosis." A number of $1,000 prizes are also offered. For information regarding these address Chas. D. Walcot, Smithsonian Institute, Washington, D. C.

DR. NORMAN BRIDGE, of Los Angeles, is secretary and treasurer of the Mexican Petroleum Company that is now paying dividends to the amount of $1,000,000 per year. The doctor is a large stockholder in this company. Dr. Bridge is also secretary and treasurer of the American Petroleum Company that has a capital of $10,000,000. How can he bear to give up the practice of medicine for such material interests?

ENURESIS.—The following formulas by Sheffield are recommended in the treatment of enuresis:

Ext. ergotae.....fl. 3iij
Ext. rhus toxicodendron.....fl. 3j
M. Sig:. Five to ten drops every four to six hours.

In cases of incontinence due to hyperesthesia of the neck of the bladder, irritating foods should be avoided, sitz baths employed and the following antispasmodic mixture given:

Ext. hyoscyami.....3ss
Sodii bromidi.....3j
Aquae anise.....ℨj
Syr. Simp., q. s. ad.....3ij
M. Sig.: One teaspoonful every four to six hours. Counter-irritation by means of mustard plaster should be employed over the lumbo-sacral region.—Jour. A. M. A.

LEUCODESCENT THERAPY.—The development of the leucodescent lamp has considerably increased physicians' ability to successfully handle a number of diseases which had heretofore been sent to baths, and institutions where special attention is given to light and heat therapy. Leaving out of the consideration the efficacy of the particular rays of this lamp, and they are undoubtedly important, the lamp makes possible the application of a high degree of heat and intense light to the affected part and these two features alone make it valuable. The light may be made to serve other purposes of phototherapy by the addition of color screens which, with varying colors, give a range of effect from irritation to a definite sedative, and this without affecting the administration of dry heat. It is safe to say that no physician who has worked with a leucodescent lamp would feel that he could do effective work without it. You never see a leucodescent lamp which does not show that it is being used.

COMING MEDICAL MEETINGS.

National Meetings

International Congress on Tuberculosis, Washington, D. C., September 21 to October 12.
Mississippi Valley Medical Association, Louisville, Ky., October 13-15, 1908.
Medical Society of the Missouri Valley, Council Bluffs, Iowa, Sept. 3-4, 1908.
Medical Association of the Southwest, Kansas City, Mo., October 20-21, 1908.

State Meetings

Colorado, Denver, October, 1908.
Idaho, Boise. October 8-9, 1908.
Kentucky, Winchester, October.
Minnesota, St. Paul, October.
Nevada, Goldfield, October 6-7.
New Mexico, Albuquerque,
Oregon, Portland, July.
Washington, Walla Walla, September 2-4.
Wisconsin, Milwaukee.
Wyoming, Sheridan.

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MEDICAL MEMORANDA.

International Congress on Tuberculosis—Preparations are in progress for an excursion party to Washington for the Missouri Valley to attend the International Congress on Tuberculosis, which meets on September 21, and continues for three weeks. For itinerary and full particulars, address Dr. Chas. Wood Fassett, Secretary Medical Society of the Missouri Valley, St. Joseph, Mo.

Prostatic Irritation—The influence of residual urine in setting up prostatic inflammation is well known. When the urine is concentrated or unduly acid it becomes doubly irritating. To induce a bland, free, unirritating urine is to remove a common exciting cause of the trouble. For this purpose there is no better remedy than alkalithia. Shut off the use of rhubarb, tomatoes and strawberries.

Gastro-Intestinal Ailments of Young Children.—(By H. B. Brown, M. D., Waukegan, Ill.)—As the hot weather approaches the usual number of cases of gastro-intestinal ailments will confront us and if we be not alert, the same mortality of old occur among our little patients of one and two years. The keystone to success in the management of these cases is to enforce correct feeding and to keep the ailmentary canal as clean and as nearly aspetic as is possible. If this be done much suffering can be obviated and many little lives saved. Every medical man these days is capable of giving correct advice on infant feeding, the care of bottles, accessories, etc., if he will only take the time and trouble to make the mother understand how important it all is. The doctor's suggestions on this matter are too often regarded as simply platitudes and not thought of seriously until the child is in the throes of a severe illness. The following clinical reports are illustrative of my usual method of handling the more common but serious gastro-intestinal diseases we encounter during the heated season:

Ethel G., aged ten months, suffering from cholera infantum; bottle fed. Was passing watery stools every few minutes. Temperature had been considerably elevated, but was now slightly subnormal. Month and tongue parched. Considerable emaciation and a scaphoid abdomen. Circulation weak and respirations labored. In fact an extreme prostrate condition. Treatment: I put four ounces of glyco-thymoline with eight ounces of water and gave it as a high enema, causing it to be retained as long as possible. This was repeated every hour or so until the bowels were thoroughly cleansed and the stools diminishing in number. Gave one-tenth grain of calomel every hour until the discharges showed the characteristic greenish color. Also gave the following:

Elixir lactopeptine.....ʒij
Glyco-thymoline.....ʒij
Oil peppermint.....gtt. j

M. Sig.—20 drops every hour. After eight hours the child was able to take nournishment and retain it. This consisted of pasteurized milk with an equal portion of lime water. Child was given all the cold water and lemonade she wanted. She made a good recovery.

Johnnie M., aged fourteen months, suffered from gastro-enteritis with much fermentation. Bowels swollen and tympanitic. Fever of a remittent type due to autotoxemia. Child delicate and poorly nourished; still nursing the mother's breast. Mother herself in poor health and in no condition to nournish her child. Treatment: Put the little one on cow's milk diluted with lime water. Three times a week I gave a high enema of a warm saline solution and glyco-thymoline equal parts. Also gave the above prescription, a teaspoonful every four hours. Child steadily improved under this treatment and in six weeks was in a good state of nutrition and health.

A bore is a man who talks about his own motor-car when you want to talk about yours.—Lippincott's.

Do you Dispense, Doctor?—Send an order to the Chicago Tablet Co., 271 South Halsted St., if you desire a finished product, and one that may be relied upon strictly for uniformity and strength. Price list and formulae on request.

Gastralgia—Papine in teaspoonful doses, given every two or three hours will promptly relieve the severe pain associated with gastralgia. The effect of one dose is often prolonged for five or six hours. Malarial Neuralgia.—Papine in one or two teaspoonful doses every three hours. Peritonitis.—Begin with one teaspoonful every three hours.

A Sample Outfit Free.—Neither doctors nor mothers would have any dread of the gastro intestinal diseases affecting children during the summer months if the "Clean-out, Clean up and Keep-clean" method of handling such cases was universally understood by the medical profession and put into practical use. In order that every reader of this journal may have the opportunity of putting this method to a thorough test, a sample outfit has been offered free to those doctors unacquainted with this treatment who will write to The Abbott Alkaloidal Co., Chicago, sending ten 2-cent stamps to cover the cost of packing and postage The outfit includes ten tried and true remedies and a 300 page Pocket Therapuetics, "Abbott's Alkaloidal Digest", givings pecial treatments, dosage, clinical application price list and a fund of other information. For particulars of this generons offer see page 14.

Treatment of Amenorrhea.—When the suppression of the menses is caused by such constitutional diseases as pulmonary tuberculosis, and the regular menstrual is overdue, 't is seldom possible to effect its return before the next period. But if the suppression is acute and the result of taking a cold, worry, fright, grief or mental shock, the flow can be promptly brought on by the administration of ergoapiol (Smith). In the former variety, ergoapiol (Smith) should be administered for ten days in advance of the regular date of the flow. For the first seven days one capsule should be given three times daily, after which the dose is to be increased to two capsules four times daily until the appearance of the flow. As soon as the flow has started the dose is again reduced to one capsule three times daily and its use continued until the period has been passed. In the second variety, viz., acute suppression, ergoapiol (Smith) is administered at once in doses of two capsules four times a day until menstruation is observed, when the dose is reduced to one capsule three times a day and continued until the flow has ceased. Ergoapiol (Smith) produces the most remarkable emmenagogue effect without the slightest untoward action. Through the tonic influence of the remedy upon the uterus and its appendages, vitality is rapidly restored to these parts, their functional activity is improved and disordered conditions are promptly corrected. Every physician is acquainted with the dangers attending the use of the majority of drugs capable of exciting the menstrual flow. In many instances their employment is followed by alarming depression and very frequently they are the causes of permanent injury to the patient. Ergoapiol (Smith) is more prompt in action than any other agent and its use is never attended by the slightest danger or discomfort, even when administered to the most delicate or sensitive subject.

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Who'll succeed Teddy? Well"—
Then she mentioned a name. Was it Taft?

But there! there's no use of your tryin'
To pump the half-lady-half-lion.
I don't feel that I can
Reveal who'll be the man,
So I'll leave you to guess. Was it Bryan?—Lippincott's.

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